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EXAMINER

YUN, JURIE

ART UNIT PAPER NUMBER

2882

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/731,860

Applicant(s)

HONDA ET AL.

Examiner

Jurie Yun

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 3 is/are allowed.
- 6) ☒ Claim(s) 1,5,8,11 and 12 is/are rejected.
- 7) ☒ Claim(s) 4,6,7,9 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because it contains more than 150 words. Correction is required. See MPEP § 608.01(b).
2. Claims 5-12 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). The claims have been treated as being dependent on claim 1.
3. Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.
4. Claim 10 is objected to because of the following informalities: It is unclear what exactly is being claimed in claim 10. Is it meant that the electrode is providing the metallic coil, which is wound on at least one part of its axis facing to the metallic coil which is on the small-diameter cylinder? Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 5, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Scholz (USPN 6,198,223 B1).

7. With respect to claims 1 and 8, Scholz discloses a high-intensity discharge lamp, comprising: a lighting-source bulb (Fig. 1, 12) provided with a light-transmissive ceramic discharge enclosure (column 2, lines 30-31) containing an enclosure defining a discharge space and a pair of small-diameter cylinders (18 & 20) communicating with the enclosure at both ends thereof and having an inside diameter smaller than the enclosure, a pair of slender electrodes (22 & 24) extending through the small-diameter cylinders of the light-transmissive ceramic discharge enclosure in leaving narrow gaps between the inside surfaces of the small-diameter cylinders and the electrodes and discharge agent filled in the light-transmissive ceramic discharge enclosure; a metallic coil (46) which is wound on at least one of the small-diameter cylinders (18) through which one of the electrodes extends, and which is coupled (45) to the other end of the electrode to have the same potential with the electrode; a jacket-bulb (Fig. 2, 48) which hermetically accommodates therein the lighting-source bulb and the metallic coil; and a pair of outer lead terminals (50 & 52) which are coupled to the pair of electrodes and hermetically led outside the jacket-bulb.

8. With respect to claim 5, Scholz discloses one end of the metallic coil (46) is placed near the boundary of the enclosure of the light-transmissive ceramic discharge enclosure (12).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scholz (USPN 6,198,223 B1).

11. With respect to claim 11, Scholz does not disclose a lighting circuit which is made by principally an inverter for lighting the high-intensity discharge lamp at a high frequency region. However, this would be obvious, since all lamps must have a lighting circuit in order to be functional. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Scholz invention and disclose a lighting circuit which is made by principally an inverter for lighting the high-intensity discharge lamp at a high frequency region. The lamp would otherwise be useless.

12. With respect to claim 12, Scholz does not disclose a lighting appliance comprising a lighting appliance principal body, and the high-intensity discharge lamp lighting system which is mounted on the lighting appliance principal body. However, this would be obvious, since all lamps would require a lighting appliance as a vehicle to utilize the lamp. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Scholz invention and disclose a lighting appliance comprising a lighting appliance principal body, and the high-intensity discharge lamp

lighting system which is mounted on the lighting appliance principal body. The lamp would otherwise be non-functional.

***Allowable Subject Matter***

13. Claims 4, 6, 7, 9, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art fails to disclose the metallic coil is wound on the small-diameter cylinder more than four turns. Prior art also fails to disclose the winding pitch of the metallic coil resides in the range of 100% to 500%. Prior art also fails to disclose the value of  $L1/L2$  will be 0.3 to 1.0, when the length of the metallic coil is denoted as  $L1$  and the length of the small-diameter cylinders of the light-transmissive ceramic discharge enclosure is denoted as  $L2$ . Prior art also fails to disclose the electrostatic capacitance across the pair of outer lead terminals are among 1.2 to 4 pF. Prior art also fails to disclose the electrode is providing the metallic coil, which is wound on at least one part of its axis facing to the metallic coil.

14. Claims 2 and 3 are allowed.

15. The following is a statement of reasons for the indication of allowable subject matter: Prior art fails to disclose a second metallic coil which is wound on the other small-diameter cylinder through which the second electrode extends, and which is coupled to the first electrode to have the same potential as the electrode. Prior art also fails to disclose a second metallic coil which is wound on the other small-diameter cylinder wherein the other electrode is inserted through.

***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamamoto et al. (USPN 6,054,810) disclose a metal halide lamp having a ceramic discharge tube. Van Den Nieuwenhuizen et al. (USPN 6,563,267 B1) disclose a high-pressure discharge lamp having seal with external antenna. Okamoto et al. (USPN 6,552,502 B2) disclose a light source device. Scholz et al. (USPN 5,998,915) disclose a mounting support for a high intensity discharge reflector lamp.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jurie Yun whose telephone number is 703 308-3535. The examiner can normally be reached on Monday-Friday 8:30-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 703 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308-7722 for regular communications and 703 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0956.

Jurie Yun  
May 29, 2003